June 19, 1923. 1,459,695

G. W. SLIGHT

MOUNTING FOR STYLUS LEVERS

Filed July 15, 1922

Fig. 1.

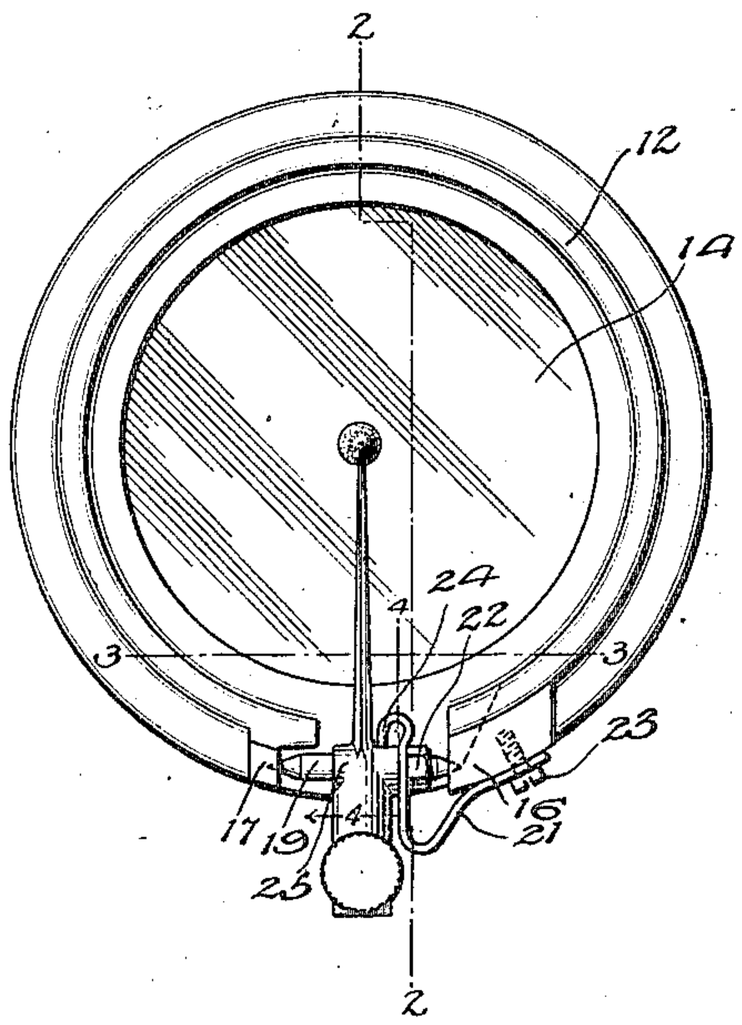


Fig. 2.

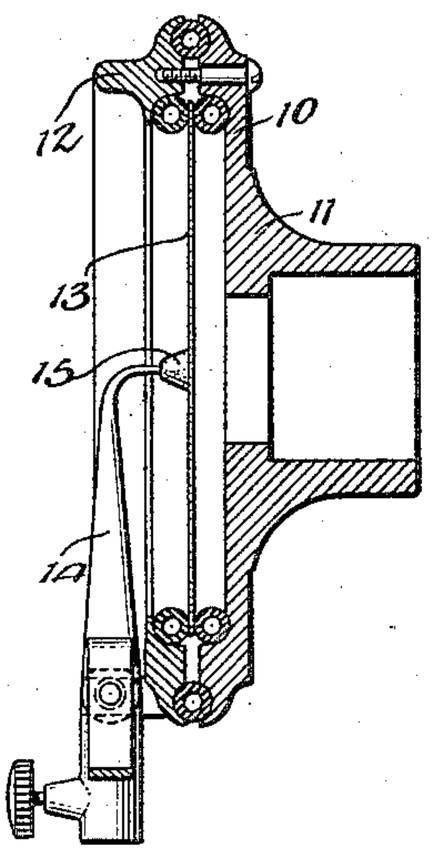


Fig. 3.

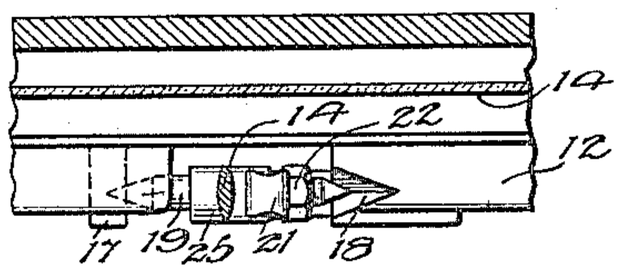


Fig. 4.

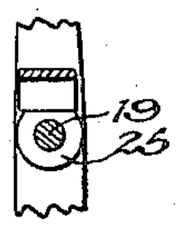


Fig. 5.

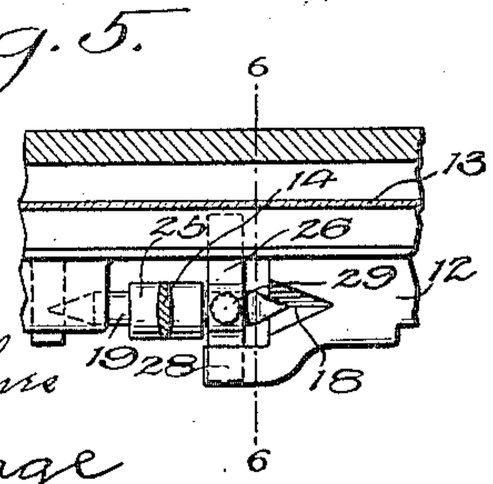
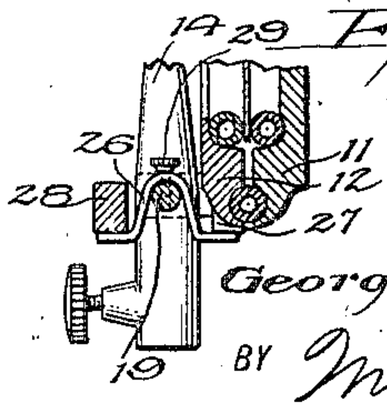


Fig. 6.



WITNESSES

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Patented June 19, 1923. 1,459,695

UNITED STATES PATENT OFFICE.

GEORGE W. SLIGHT, OF BROOKLYN, NEW YORK.

MOUNTING FOR STYLUS LEVERS.

Application filed July 15, 1922. Serial No. 575,242.

To all whom it may concern:

Be it known that I, GEORGE W. SLIGHT, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Mountings for Stylus Levers, of which the following is a full, clear, and exact description.

This invention relates to mountings for stylus levers in sound boxes.

The general object of this invention is the provision of a simple and efficient mounting for stylus levers in sound boxes, provided with a self-compensating means for taking care of the wear in the bearings.

These objects are accomplished by providing a stylus lever, having a trunnion extending at right angles thereto, forming bearings in the casing, one of which is a groove extending at an angle to the axis of the trunnion, and mounting on the casing a spring which tends to draw the trunnion along the groove to compensate for wear.

These and other objects of the invention will be more clearly understood from the following detailed description and accompanying drawings.

Figure 1 is a side elevation of a sound box, showing the mounting;

Figure 2 is a section along the line 2—2, Figure 1;

Figure 3 is a section along the line 3—3, Figure 1;

Figure 4 is a section along the line 4—4, Figure 1;

Figure 5 is a bottom plan view of a modification of the self-compensating mounting;

Figure 6 is a section along the line 6—6, Figure 5.

Referring to the above-mentioned drawings, a casing 10 made up of two sections 11 and 12 has a diaphragm 13 mounted therein. A stylus lever 14 is attached to the diaphragm at 15, and is provided with a trunnion 19. Integral with the casing section 12 are two lugs 16 and 17. In the lug 17 a cone-shaped bearing is formed for receiving one end of the trunnion 19, while the bearing for the lug 16 is in the form of a groove 18, the bottom of which extends at an angle to the axis of the trunnion 19. The trunnion 19 is mounted in the bearings formed in the lugs 16 and 17. A V-shaped spring 21, one arm of which has the end 24 bent back upon itself, is attached to the lug 16 by means of a screw 23. The spring 21 has an opening extending through it which allows the trunnion 19 to project therethrough, and a nut 22 is provided for clamping the spring in position on the trunnion. The end 24 of the spring seats on a hub 25 formed near the lower end of the stylus lever 14. Thus it will be seen that as the bearing in the lug 16 is worn away the spring 21 serves to draw the trunnion along the groove 18, compensating for wear. The spring also increases the speed of vibration of the stylus lever.

In the modification shown in Figures 5 and 6, a U-shaped spring 26, the ends of which seat on projections 27 and 28 formed on the casing 10 carries one end of the trunnion 19 and tends to force it along the groove 18. A screw 29 is provided for attaching the spring 26 to the trunnion 19. This device compensates for wear in the same manner as the preferred construction described above.

I would state in conclusion that while the illustrated examples constitute practical embodiments of my invention I do not limit myself strictly to the exact details herein illustrated since manifestly the same can be considerably varied without departing from the spirit of the invention as defined in the appended claims.

Claims:

1. A device of the character described, comprising a sound box casing, bearings formed in the casing, one of the bearings being in the form of a groove, a stylus arm provided with a trunnion, said trunnion being pivotally mounted in the bearings formed in the casing, and a spring carried by the casing and engaging the trunnion to move the trunnion along the groove to compensate for wear.

2. The combination of a sound box casing, a stylus arm provided with a trunnion, bearings carried by the casing for supporting the trunnion, one of said bearings having a groove extending at an angle to the axis of the trunnion in which the trunnion engages, and means for drawing the trunnion along said groove to compensate for wear.

3. In a sound box including a sound box casing and stylus arm, a mounting for the stylus arm comprising a trunnion attached to the stylus arm, lugs carried by the casing, bearings formed in said lugs, one of the bearings consisting of a groove extending at

an angle to the axis of the trunnion, and a spring carried by the casing and engaging the trunnion serving to draw it along said groove to compensate for wear.

4. A device of the character described, comprising a sound box casing, bearings formed on the sound box casing, one of the bearings being in the form of a groove, a stylus lever having a trunnion attached thereto mounted in the bearings, the axis of the trunnion being at an angle to the bottom of said groove, and means mounted on the casing serving to draw the end of the trunnion mounted in the groove along the groove to compensate for wear.

GEORGE W. SLIGHT.